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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/748,977

12/30/2003

Angel Stoyanov

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08/15/2008

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EXAMINER

WHITE, EVERETT NMN

ART UNIT

PAPER NUMBER

1623

NOTIFICATION DATE

DELIVERY MODE

08/15/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@weyerhaeuser.com

Office Action Summary	Application No. 10/748,977	Applicant(s) STOYANOV ET AL.	
	Examiner EVERETT WHITE	Art Unit 1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-14 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-14 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed April 22, 2008 has been received, entered and carefully considered. The amendment affects the instant application accordingly:
 - (A) Claims 2, 15 and 16 are canceled;
 - (B) Claims 1 and 3 have been amended;
 - (C) Comments regarding Office Action have been provided drawn to:
 - (I) 103(a) rejections, which are maintained for the reasons of record.
2. Claims 1, 3-14 and 17 are pending in the case.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 3, 4, 6, 10, 12-14 and 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant's amendment with respect to amended Claim 1 herein has been fully considered but is deemed to insert new matter into the claims since the specification as originally filed does not provide support for "185°C to 215°C" since a curing temperature of 185°C has not mentioned in the instant specification. Also, there is no support in the instant specification as originally filed of a statement that recites that the "Whiteness Index of the individualized intrafiber crosslinked cellulosic fibers are greater than about 73.0". There is no mentioned in the specification of a Whiteness Index of 73.0.

Claim Rejections - 35 USC § 103

5. Claims 1, 3, 4, 6, 10, 12-14 and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al (US Patent No. 5,589,256) for the reasons disclosed on pages 3-5 of the Office Action mailed July 28, 2005.

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6. Applicant's arguments filed April 22, 2008 have been fully considered but they are not persuasive. Applicants amended the Claim 1 to recite a curing temperature range from 185°C to about 215°C and argue against the rejection on the ground that the Hansen et al '256 patent, which discloses a curing temperature within a range of about 140°C to about 180°C, teaches away from the currently recited curing temperature range. This argument is not persuasive in view of the rejection of this temperature range under 35 USC 112, 1st paragraph as not being supported in the specification as originally filed. Furthermore, limitation of a process with respect to ranges of pH, time and temperature does not impart patentability to a process when such values are those, which would be determined by one skilled in the art in achieving optimum operation of the process. *In re Mostovych et al.* (CCPA 1964) 339 F2d 455, 144 USPQ 38; *In re Aller et al.* (CCPA 1955) 220 F2d 454, 105 USPQ 233.

Applicants argue that one skilled in the art would not look to a reference that teaches binding of particles to fibers to increase the Whiteness Index of the crosslinked fibers since crosslinking in the presence of a binder such as a polyol can also crosslink destroys the binding that Hansen teaches. This argument is not persuasive since the Hansen et al patent is only cited to show that the claimed method for forming individualized intrafiber crosslinked cellulosic fibers would be obvious in view of the Hansen et al '256 patent. Although, the instant claims indicate a specific Whiteness Index for the cellulosic fibers thereof, the claims as currently written are drawn to a method for forming individualized intrafiber crosslinked cellulosic fibers.

Applicants argue that discolored fibers would have a different structure than those claimed in the instant application with the indicated high Whiteness Index. This argument is not persuasive since the structure of the cellulosic fibers have not been disclosed in the claims.

Applicants argue that curing the crosslinking agent in the presence of a polyol gives unexpected synergistic Whiteness Index results. It should be noted that synergism exhibited by a physical mixture of ingredients is a factor to be considered in determining the obviousness of the composition but it is not controlling since synergism may be expected or unexpected. *In re Hullmantel*, (CCPA 1963) 324 F2d 998, 139

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USPQ 496; *Ethyl Corp. v. Ladd. Comr. Pats.* (DCDC 1963) 221 F Supp 751, 138 USPQ 663.

Accordingly, the rejection of Claims 1, 3, 4, 6, 10, 12-14 and 17 under 35 U.S.C. 103(a) as being unpatentable over Hansen et al's U.S. Patent No. 5,589,256 is maintained for the reasons of record.

7. Claims 1 and 5-11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al (US Patent No. 5,589,256) as applied to Claims 1, 3, 4, 6, 10, 12-14 and 17 above, and further in view of Hansen et al (US Patent No. 5,789,326) for the reasons disclosed on pages 5 and 6 of the Office Action mailed July 28, 2005.

8. Applicant's arguments filed April 22, 2008 have been fully considered but they are not persuasive. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, one of ordinary skill in this art would be motivated to combine the teaching of the Hansen et al '256 patent with the teaching of the Hansen et al '326 patent since both patents suggest preparation of high bulk fibers that involve curing the fibers at temperatures ranging from about 140°C to about 180°C.

Accordingly, the rejection of Claims 1, 5-11 under 35 U.S.C. 103(a) as being unpatentable over Hansen et al '256 patent as applied to Claims 1-4, 12-14 and 17 above, and further in view of Hansen et al '326 patent is maintained for the reasons of record.

Summary

9. All the pending claims are rejected.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Examiner's Telephone Number, Fax Number, and Other Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is 571-272-0660. The examiner can normally be reached on 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Everett White/
Examiner, Art Unit 1623

/Shaojia Anna Jiang, Ph.D./
Supervisory Patent Examiner, Art Unit 1623